Neosodon

Neosodon (meaning "new tooth") was a genus of sauropod dinosaur from the Late Tithonian-age Upper Jurassic Sables et Gres a Trigonia gibbosa of Département du Pas-de-Calais, France.[1][2] It has never been formally given a species name, but is often seen as *N. praecursor*, which actually comes from a different animal. Often in the past, it had been assigned to the wastebasket taxon *Pelorosaurus*, but restudy has suggested that it could be related to *Turiasaurus*, a roughly-contemporaneous giant Spanish sauropod. It is only known from six teeth.[3]

Neosodon

Temporal range: Late Tithonian, 146 Ma

Pre€ € O S D C P T J K PgN

Neosodon teeth

Scientific classification	
Kingdom:	Animalia
Phylum:	Chordata
Clade:	Dinosauria
Clade:	Saurischia
Suborder:	†Sauropodomorpha
Clade:	†Sauropoda
Genus:	†*Neosodon* Moussaye, 1885

History and taxonomy

Moussaye named this genus for a large, broken, worn tooth found in Wilmille, near Boulogne-sur-Mer, and neglected to give it a species name. He thought that it belonged to a theropod like *Megalosaurus*.[3] Since then, five more teeth have been found and assigned to *Neosodon*.

Sauvage synonymized it with his tooth species *Iguanodon praecursor*,[4][5] which by this time had become mixed up with Edward Drinker Cope's roughly contemporaneous American Morrison Formation genus *Caulodon* (now a synonym of *Camarasaurus*). However, the two are not based on the same type, as "I". *praecursor* comes from slightly older rocks: the same unnamed Kimmeridgian formation as *Morinosaurus*.[6] Earlier reviews (Romer, 1956; Steel, 1970) accepted it as a synonym of *Pelorosaurus*, and considered it a possible brachiosaurid.[7][8]

In the 1990s, French researchers published on new camarasaurid bones from the same formation. At first, Buffetaut and Martin (1993) suggested that they belonged to *Neosodon praecursor*,[9] but Le Loeuff *et al.* (1996) later rejected this, as *Neosodon* is based only on several teeth, which did not overlap the new material.[10] The latest review accepted both *Neosodon* and "Iguanodon" *praecursor* as dubious sauropods.[11] However, Royo-Torres *et al.* (2006), in their description of *Turiasaurus*, noted that this tooth was similar to those of their genus and suggested that it could be a turiasaur.[12]

Paleobiology

The teeth referred to *Neosodon* are large (60 mm [2.36 in] tall and a cross-section of 35 by 20 mm (1.38 by 0.79 in) in its incomplete state, estimated at 80 mm [3.15 in] tall if complete)[3] and spear-like or spatulate in shape. The owner would have been a large, quadrupedal herbivore.[11]

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